

IN THE CLAIMS

Claims 20 to 28, 32 and 34 to 39 have been canceled without prejudice. Claims 29 to 31 and 33 have been amended. The following listing of claims is provided as a courtesy to the Examiner:

Listing of Claims:

Claims 1-28 (cancelled)

Claim 29 (previously presented): The apparatus as recited in claim 28, An apparatus for humidifying a gas stream, comprising:

a humidifier device including at least one membrane permeable to water vapor, wherein the gas stream and a humid gas stream flow through a humidifier device, the gas stream and the humid gas stream being separated from one another by the at least one membrane; and

at least one bypass line configured to route at least part of one of the gas stream and the humid gas stream so that it does not come into contact with the membrane;

a device for varying a volumetric flow through the at least one bypass line integrated in the humidifier device;

wherein the gas stream is an inlet gas stream for a fuel cell system and the humid gas stream includes an exhaust gas stream from the fuel cell system;

wherein the at least one bypass line is integrated in the humidifier device;

wherein the device for varying the volumetric flow includes a valve plunger disposed at one of an inlet and an outlet opening of the bypass line, the valve plunger configured to vary a cross section of the bypass line depending on a distance to the inlet or outlet opening.

Claim 30 (previously presented): The apparatus as recited in claim 28, An apparatus for humidifying a gas stream, comprising:

a humidifier device including at least one membrane permeable to water vapor, wherein the gas stream and a humid gas stream flow through a humidifier device, the gas stream and the humid gas stream being separated from one another by the at least one membrane; and

at least one bypass line configured to route at least part of one of the gas stream and the humid gas stream so that it does not come into contact with the membrane;

a device for varying a volumetric flow through the at least one bypass line integrated in the humidifier device;

wherein the gas stream is an inlet gas stream for a fuel cell system and the humid gas stream includes an exhaust gas stream from the fuel cell system;

wherein the at least one bypass line is integrated in the humidifier device;

wherein the device for varying the volumetric flow includes a variable diaphragm that varies a cross section of the bypass line depending on a position and opening diameter of the variable diameter.

Claim 31 (previously presented): ~~The apparatus as recited in claim 28,~~An apparatus for humidifying a gas stream, comprising:

a humidifier device including at least one membrane permeable to water vapor, wherein the gas stream and a humid gas stream flow through a humidifier device, the gas stream and the humid gas stream being separated from one another by the at least one membrane; and

at least one bypass line configured to route at least part of one of the gas stream and the humid gas stream so that it does not come into contact with the membrane;

a device for varying a volumetric flow through the at least one bypass line integrated in the humidifier device;

wherein the gas stream is an inlet gas stream for a fuel cell system and the humid gas stream includes an exhaust gas stream from the fuel cell system;

wherein the at least one bypass line is integrated in the humidifier device;

wherein the device for varying the volumetric flow includes two discs rotatable relative to one another openings, the device varying a cross section of at least one of the bypass line a flow region to the membrane depending on an angle of rotation of the two disks relative to one another.

Claim 32 (canceled).

Claim 33 (currently amended): ~~The apparatus as recited in claim 32,~~An apparatus for humidifying a gas stream, comprising:

a humidifier device including at least one membrane permeable to water vapor, wherein the gas stream and a humid gas stream flow through a humidifier device, the gas stream and the humid gas stream being separated from one another by the at least one membrane; and

at least one bypass line configured to route at least part of one of the gas stream and the humid gas stream so that it does not come into contact with the membrane;

a device for varying a volumetric flow through the at least one bypass line integrated in the humidifier device;

a further humidifier device disposed downstream of the device, wherein the humid gas stream is routed into the further humidifier device so as to humidify a further gas stream;

wherein the gas stream is an inlet gas stream for a fuel cell system and the humid gas stream includes an exhaust gas stream from the fuel cell system;

wherein the at least one bypass line is integrated in the humidifier device;

wherein the further gas stream is a feed air passing into a gas generation device of the fuel cell system.

Claims 34 to 39 (canceled).